



July 30, 2014

Mr. Dwight Leisle  
Port of Portland  
7200 NE Airport Way  
Portland, Oregon 97218

Re: IRAM Completion Letter, DU-6  
Willamette Cove Upland Facility  
Portland, Oregon  
ECSI No. 2066  
1056-05

Dear Mr. Leisle:

This letter presents the results of the Decision Unit 6 (DU-6) Interim Remedial Action Measure (IRAM) activities completed on July 21, 2014 for the Willamette Cove Upland Facility (the Facility; Figures 1 and 2) in the St. Johns area of Portland, Oregon. Work at the Facility was conducted under Voluntary Agreement EC-NWR-00-26 between the Port of Portland (Port), Metro, and the Oregon Department of Environmental Quality (DEQ).

The IRAM activities were completed in accordance with the DEQ-approved work plan, *Willamette Cove Upland Facility, DU-6 Interim Action* (Apex, 2014). The methods, procedures, and results of the interim action are presented in this letter.

## **BACKGROUND**

Based on relatively higher concentrations of dioxins/furans in the DU-6 area, DEQ requested that the Port complete an IRAM to address potential human health risks prior to implementation of removal actions or final remedies. The IRAM target area included the extent of exposed, bare soil in DU-6 with dioxin/furan TEQ (toxic equivalent) concentrations that exceed 10,000 ng/kg. The DU-6 area is in a portion of the site that is relatively narrow and does not have a beach. The only human activity indicated is the footpath, so interim action that addresses the exposed soil in the pathway will address the short-term risk.

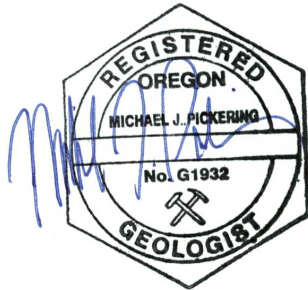
## **INTERIM ACTION ACTIVITIES**

Access to the site was through N. Edgewater Street. The access road is blocked by large concrete blocks/rubble at two locations. The blocks/rubble were removed to provide access and then replaced after completion of the work.

Each end of the targeted 180 foot long by 7 foot wide cap area was identified using a high-accuracy, handheld global positioning system (GPS) device (Trimble® GeoXH™). A cap consisting of a 3-inch-thick layer of crushed rock (3/4-inch minus) was spread evenly across the existing exposed surface of the former roadway within the target area. This width of the cap was defined by the edges of the contiguous dense vegetation on either side of the former roadway. The crushed rock was imported from a commercial supplier, free of debris and vegetation and placed using a small excavator with bucket, leveled as appropriate to maintain the cap thickness. The crushed rock was

compacted with a small wheeled compactor to a firm condition to dissuade any potential deviations from the path due to loose material. Based on the quantity of gravel delivered, the overall length of the capped area was approximately 220 feet (Figure 3). The extra 40 feet was placed on the east end of the target area.

Sincerely,



*expires 12/31/2014*

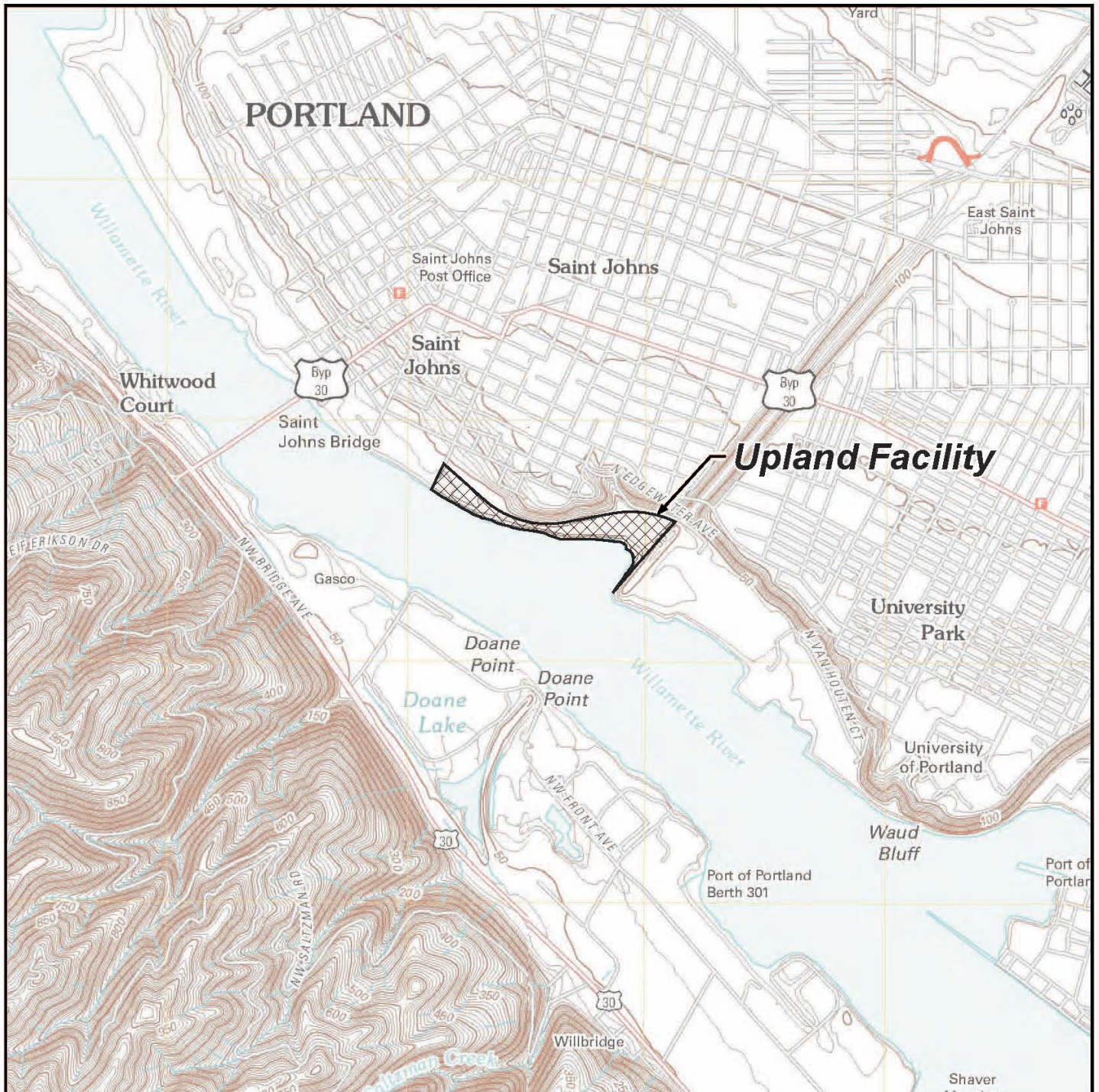
Michael J. Pickering, R.G.  
Senior Associate Hydrogeologist

#### **ATTACHMENTS**

Photograph Log  
Figure 1 – Facility Location Map  
Figure 2 – Facility Plan  
Figure 3 – IRAM Cap Area

#### **REFERENCE**

Apex, 2014. Willamette Cove Upland Facility, DU-6 Interim Action, Portland, Oregon. July 7, 2014.



**Note:** Base map prepared from USGS 7.5-minute quadrangles of Linnton and Portland, OR, dated 2011 as provided by USGS.gov.



## Facility Location Map

IRAM Completion Letter, DU-6  
Willamette Cove Upland Facility  
Portland, Oregon



Apex Companies, LLC  
3015 SW First Avenue  
Portland, Oregon 97201



Project Number	1056-05
July 2014	

Figure  
**1**





**Legend:**

- DU-7**  ISM Sample Boundary
-  Approximate Removal Actions Areas

0 200 400  
Scale in Feet

**Facility Plan**

IRAM Completion Letter, DU-6  
Willamette Cove Upland Facility  
Portland, Oregon

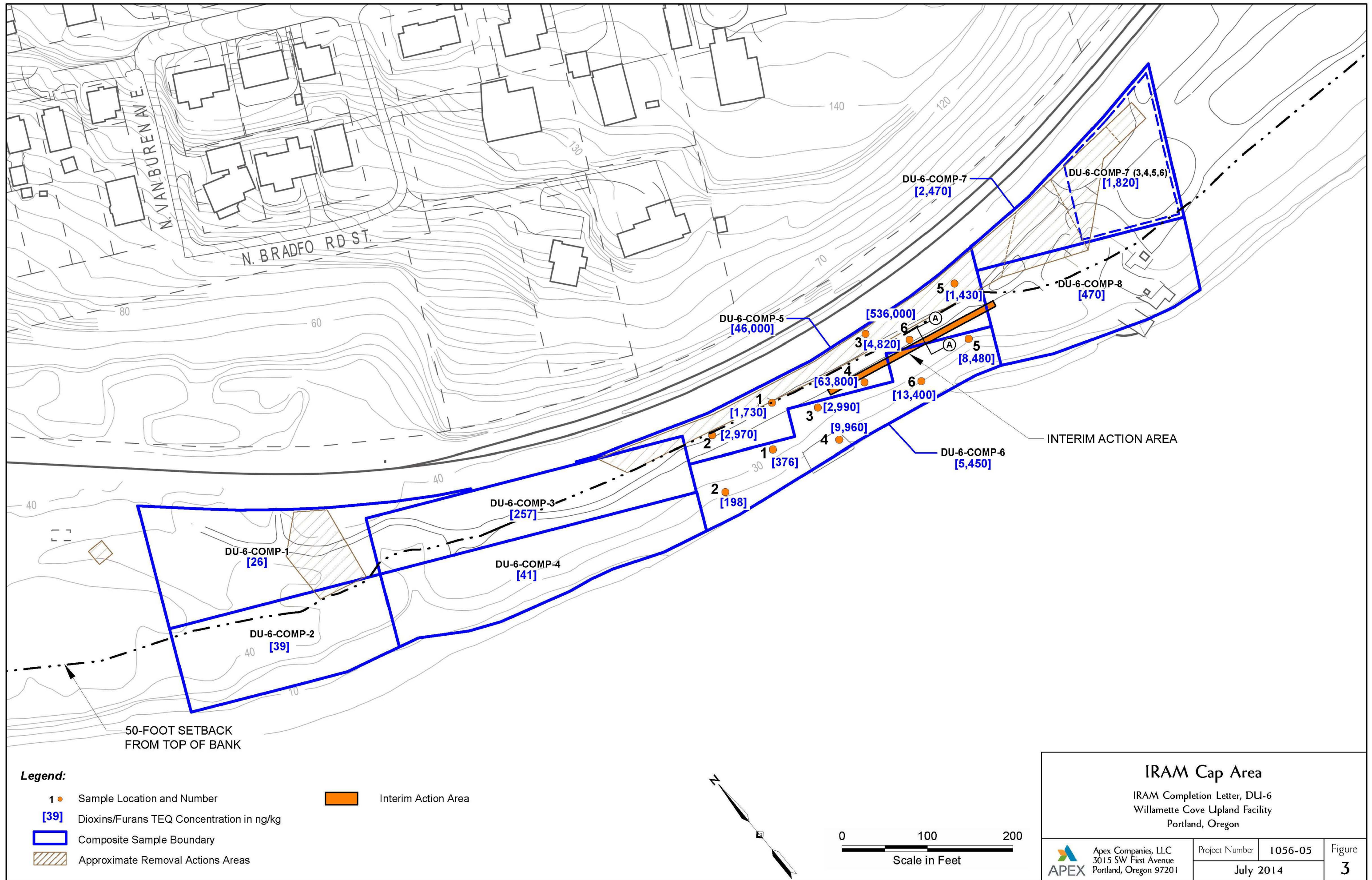


Apex Companies, LLC  
3015 SW First Avenue  
Portland, Oregon 97201

Project Number 1056-05  
July 2014

Figure  
2





## ***Attachment A***

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### **Photograph Log**



## Attachment A PHOTOGRAPH LOG

**Project Name:** Willamette Cove Upland Facility  
**Project Number:** 1056-06

**Client:** Port of Portland  
**Location:** Portland, Oregon

<b>Photo No:</b> 1	
<b>Photo Date:</b> 7/21/14	
<b>Orientation:</b> West	
<b>Description:</b>  Targeted portion of pathway prior to capping.	
<b>Photo No:</b> 2	
<b>Photo Date:</b> 7/21/14	
<b>Orientation:</b> South	
<b>Description:</b>  Gravel cap placed to the edge of vegetation.	



## Attachment A PHOTOGRAPH LOG

**Project Name:** Willamette Cove Upland Facility  
**Project Number:** 1056-06

**Client:** Port of Portland  
**Location:** Portland, Oregon

<b>Photo No:</b> 3	
<b>Photo Date:</b> 7/21/14	
<b>Orientation:</b> East	
<b>Description:</b> Compacting gravel with wheel roller.	
<b>Photo No:</b> 4	
<b>Photo Date:</b> 7/21/14	
<b>Orientation:</b> East	
<b>Description:</b> Completed capped looking east.	



## Attachment A PHOTOGRAPH LOG

**Project Name:** Willamette Cove Upland Facility  
**Project Number:** 1056-06

**Client:** Port of Portland  
**Location:** Portland, Oregon

<b>Photo No:</b> 5	
<b>Photo Date:</b> 7/21/2014	
<b>Orientation:</b> West	
<b>Description:</b>  Completed cap looking west. The darker gray portion of cap is the additional gravel placed beyond the planned 180 feet.	